UNIVERSAL HEALTH INSURANCE COVERAGE USING MEDICARE'S PAYMENT RATES

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NOTE

Details in the text and tables of this study may not add to totals because of rounding.

PREFACE

This study was done at the request of the Subcommittee on Health of the House Committee on Ways and Means. It examines the potential effects on national health expenditures if health insurance were extended to the uninsured, and if all payers used Medicare's payment rates for physician and hospital services. The study provides illustrative estimates for two types of health care systems. The "all-payer" system would retain the current mix of public and private insurers, but would require that all payers use Medicare's payment rates. The "single-payer" system would replace the current multiplicity of insurers with a single public insurance plan that would cover all basic medical services. In keeping with CBO's mandate to provide objective and impartial analysis, the study makes no recommendations.

The study was prepared by Terri Menke of CBO's Human Resources and Community Development Division, under the direction of Nancy Gordon and Kathryn Langwell. After Terri Menke's departure from CBO, Sandra Christensen updated the information on which the results are based and revised the text. Jack Rodgers also contributed to the study by obtaining and interpreting information on hospitals' revenues and costs.

Sherwood Kohn edited the manuscript; Chris Spoor provided editorial assistance. Ronald Moore provided administrative assistance for the project and typed portions of the many drafts. Martina Wojak typed the many drafts of the tables. Kathryn Quattrone prepared the manuscript for publication.

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SUMMARY

Although the United States is a leader in medical research and has the ability to deliver health care of the highest quality, there is widespread dissatisfaction with our health care system. Critics find fault with two aspects of it. They point out that a substantial number of people lack health insurance coverage, while spending for health care--both per person and as a share of national income--is high compared with countries that have universal coverage. Further, critics say, both problems have been worsening. Between 1980 and 1990, health spending grew from 9.2 percent to 12.2 percent of gross national product. During the same period, the proportion of people without health insurance increased by 25 percent. In 1990, 33 million people--13.6 percent of the population--were uninsured. They used fewer health care services than insured people, because access to health care in the United States depends largely on health insurance coverage.

This study examines two approaches by which both universal health insurance coverage and greater control over health care costs might be achieved. (See Summary Table 1. Alternative approaches are discussed in other CBO studies.) Both approaches would apply Medicare's payment rates to all physician and hospital services that are covered, while concurrently extending health insurance to people who are now uninsured. Under both approaches, balance billing (physicians' charges above approved payment rates) would be prohibited. One approach would make these changes under an "all-payer" system that would retain the current multiplicity of private and public insurers. The other approach would introduce a "single payer" that would insure everyone for designated services. The potential for reducing current health care costs would be greater under a single-payer system than under an all-payer approach, but a single-payer system would also require more fundamental change from the present system with less choice about the kind of insurance coverage that could be obtained. Both approaches would improve the potential for slowing future growth of costs.

Under an all-payer approach, the federal government would set payment rates for all insurers. All payers would be required to reimburse physicians and hospitals at Medicare's rates. The benefits offered under private insurance plans, Medicaid, and Medicare would be the same as they are now, but Medicare coverage would be extended to the uninsured. Those with Medicaid or private insurance would be discouraged from dropping that coverage in favor of Medicare.

SUMMARY TABLE 1. COMPARISON OF HEALTH INSURANCE FEATURES UNDER ILLUSTRATIVE ALL-PAYER AND SINGLE-PAYER SYSTEMS

	All-Payer	Single-Payer
Availability of Coverage	Universal.	Universal.
Insurer	Current mix of private and public insurers. Medicare coverage extended to uninsured. Medigap coverage would continue. Shifting from Medicaid or private insurance to Medicare would be discouraged.	Single public insurer for basic medical services. Private insurers could offer coverage for excluded services but medigap-type coverage would be prohibited. Residual Medicaid program would continue.
Benefit Package	Current mix of packages. Previously uninsured would have current Medicare benefit package.	Uniform benefit package for basic medical services, resembling comprehensive plans employers typically offer now.
Financing	Current mix of taxes, premiums paid by insured, and premiums paid by employers. Medicare coverage for previously uninsured would be financed from taxes.	Universal plan would be tax financed, as would residual Medicaid program. Any private insurance would be financed by premiums paid by the insured or their employers.
Payment Rates	Medicare's rates for physician and hospital services. Balance billing would be prohibited.	Medicare's rates for physician and hospital services. Balance billing would be prohibited.

SOURCE: Congressional Budget Office.

Under a single-payer approach, the government would be the sole insurer for all basic health care services. There would be only one benefit package, which in the illustrations presented in this study would be actuarially equivalent to the average benefits that private insurance plans and Medicare currently provide. The illustrative universal plan would cover the services typically included in private insurance plans, and would require copayments by patients that would be limited by an annual cap. The plan would cover all U.S. residents. Private insurers would not be permitted to offer competitive or supplementary insurance (such as medigap) for services provided under the universal plan, but they could cover other services. A residual Medicaid program would supplement the universal plan for low-income people, covering their copayments and some services (primarily long-term care) excluded from the universal plan.

This study shows the effects these two approaches would have had on spending for health care services and the associated costs of administration if they had been fully in place in 1989. Because many of the factors that would determine the effect of these changes on spending are uncertain, the study presents three sets of estimates, ranging from relatively pessimistic (Alternative 1) to relatively optimistic (Alternative 3) about the net effect on health expenditures. The complexity of the changes in the health care system that are examined here, and uncertainty about how providers and their patients would subsequently react, argue for producing a range of potential effects rather than a single estimate. No attempt has been made to estimate the costs associated with a transition from the current system.

The calculations presented in this study are not cost estimates. The cost estimates that the Congressional Budget Office prepares for specific legislative proposals require much more detail about the characteristics of the proposals and how they would be carried out. Further, they show the impact on the federal budget. The illustrations in this study are primarily intended to show the range of possible effects on national spending for health--not on the federal budget--that might result under the two approaches.

ILLUSTRATIVE CHANGES IN HEALTH CARE SPENDING

Under each of the illustrations in this study, the use of health care services would increase, while associated administrative costs (as a percentage of personal health expenditures at given payment rates) would decrease or be unchanged. Although payment rates for services used by those who are privately insured would fall, the added costs of covering the uninsured and of raising Medicaid's rates to Medicare's levels would more than offset these savings. For three of the six alternatives examined, though, the drop in administrative costs would be substantial enough to cover the higher costs for health care services. (In this study, administrative costs include overhead expenses for providers as well as for government health programs and private insurers.)

Changes in Spending for Health Care Services

The effects on spending for health care services (before any reduction in payment rates aimed at capturing providers' savings on overhead expenses) would be identical under either of the two approaches this study examines. Health care for those who currently have private insurance would cost less because payment rates, but not use of services, would be lower for this group at Medicare's rates. Health care for those covered by Medicaid and those who are now uninsured would cost more because payment rates and use of services would both be higher. Costs for Medicare enrollees would fall because balance billing by physicians would be prohibited.

Based on relatively pessimistic assumptions, the net result of these effects would be to increase spending for covered physician and hospital services by about $26 billion. Under relatively optimistic assumptions, spending would increase by only $0.2 billion. The assumptions used differ with respect to the current value of Medicare's payment rates compared with those of Medicaid and private payers, and the extent to which Medicaid recipients and the uninsured would increase their use of services.

Changes in the Overhead Expenses of Providers

Providers' overhead costs would be affected differently by the two approaches examined here, with larger savings achievable under a single-payer system. Spending on health would decrease as a result of lower overhead costs for providers, however, only if payment rates were reduced from Medicare's current levels to reflect these lower costs.

Under an all-payer system, overhead expenses for providers would fall primarily because collection costs would be lower if payment rates were uniform and the uninsured were covered. In the relatively optimistic illustration, it is assumed that payers could capture all of the potential savings on providers' overhead expenses under this system. In that case, payers' costs would be reduced by about $18 billion, even after taking into account the additional overhead costs resulting from the higher level of services provided. Under relatively pessimistic assumptions, no savings on overhead would be realized. Instead, the higher level of services would increase these costs by about $4 billion.

Under a single-payer system, additional savings would occur because providers would no longer have to deal with many different insurers, each with its own requirements for claiming reimbursement. In this case, under relatively optimistic assumptions, overhead costs for providers would fall by about $36 billion. Under relatively pessimistic assumptions, the effects would be the same as under an all-payer system, with costs increasing by about $4 billion.

Changes in the Overhead Expenses of Insurers

The two approaches examined here would also affect insurers' overhead costs differently, with larger savings associated with a single-payer system. Under an all-payer system, it is assumed that overhead costs for insurers would not be reduced because the current system of private and public insurers would be unchanged. Instead, these costs would increase slightly, by up to $0.6 billion, because of the additional administrative expenses associated with covering the uninsured.

Under a single-payer system, overhead costs for insurers would fall by about $22 billion. Universal coverage by a single payer would eliminate the expenses of marketing insurance plans, assessing risk to determine premiums, and coordinating with other insurers who provide overlapping coverage. The costs of processing claims might also be lower with a single payer if economies of scale are possible.

Overall Effects

Under an all-payer system, the net result of changes in spending for health care services, providers' overhead, and insurers' administration would (based on relatively pessimistic assumptions) increase national health expenditures (NHE) by $30 billion, or 5 percent (see Summary Table 2). Under midrange assumptions, NHE would increase by $5.6 billion, or 0.9 percent. Based on relatively optimistic assumptions, NHE would fall by $17.3 billion, or 2.9 percent.

Under a single-payer system, the net results would be more favorable for each alternative. Using relatively pessimistic assumptions, NHE would increase by $7.4 billion, or 1.2 percent. Using midrange assumptions, NHE would fall by $26.3 billion, or 4.3 percent. Based on optimistic assumptions, national health expenditures would fall by $58.1 billion, or 9.6 percent.

For the single-payer system, it is assumed that there would be no private supplementary health insurance. If private insurance were permitted and became widespread, national health expenditures would be higher than shown. Insurance coverage for copayments under the universal plan (like that under current medigap plans) would significantly increase costs for health benefits because use of services covered by the universal plan would be higher. If private insurers offered coverage only for services excluded from the universal plan--for routine eye and dental care, for example--spending for those services would probably increase somewhat, but spending for services covered under the universal plan would be unaffected. In either case, total costs of

SUMMARY TABLE 2. ILLUSTRATIVE CHANGES IN NATIONAL HEALTH EXPENDITURES, 1989

Assumptions	In Billions of Dollars	As a Percentage of National Health Expenditures
	All-Payer System	
Alternative 1	30.0	5.0
Alternative 2	5.6	0.9
Alternative 3	-17.3	-2.9
	Single-Payer System	
Alternative 1	7.4	1.2
Alternative 2	-26.3	-4.3
Alternative 3	-58.1	-9.6

SOURCE: Congressional Budget Office estimates based on data from the Health Care Financing Administration, the American Hospital Association, and the American Medical Association.

NOTE: The estimating assumptions used for the six alternatives are described in Chapter III, Table 4.

administration would be a little higher because of the expenses incurred by private insurers for marketing and claims processing.

OTHER CONSIDERATIONS

In addition to providing health insurance for people who are currently uninsured, both of the approaches examined in this study would enable cost control efforts to be more effective than they are under the current system of multiple uncoordinated payers. The introduction of uniform payment rates for physician and hospital services, with increases under the control of the federal government, would permit the government to slow the growth in health care prices. Further, uniform pricing (and coordination among payers in the case of the all-payer system)

would make it possible to create a comprehensive data base that could be used to control growth in the volume of services as well. For example, physicians could be monitored to identify and influence those whose treatment patterns are inappropriately costly.

Despite these advantages, some critics believe that neither an all-payer nor a single-payer system would be desirable. Under both approaches, a disruptive reallocation of revenues might occur. Providers in affluent, well-insured areas would probably see their revenues fall, and those practicing in areas where a substantial proportion of the population is uninsured or poor would see theirs increase.

Under an all-payer system, the choice between private insurance and coverage under Medicare could pose additional problems. People who now have private insurance might be tempted by lower premiums to drop it in favor of Medicare. Some employers might terminate their health plans altogether, once Medicare coverage was available to their employees. Further, state Medicaid programs might enroll recipients in Medicare if the premiums were lower than the cost of services recipients use. Medicare would become the insurer of last resort, enrolling a disproportionate number of high-risk people, unless Medicare charged premiums comparable to those charged by private insurers. But if premiums were charged, some of the uninsured would choose not to enroll in Medicare and universal coverage would not be achieved. It is assumed here that broad-based taxes would pay the costs of extending Medicare to the uninsured, in order to cover everyone, but that no privately insured people or Medicaid recipients would move to the Medicare program. Penalties or prohibitions would have to be installed to prevent those currently covered by Medicaid or private insurance from switching to the Medicare program. If these restrictions were not completely effective, the effects on national spending for health would not be much different from the estimates shown here, but the federal government (through Medicare) would account for a larger share of that spending.

Under a single-payer system, individuals would have less freedom to choose their insurance package. If (as assumed here) the universal health insurance plan were actuarially equivalent to the average benefits now offered by Medicare and private insurers, people who now

have the most generous insurance arrangements would see their benefits fall. Further, the financing arrangements for a government-sponsored single-payer plan would almost certainly raise costs for affluent people. Thus, this group would probably pay more for coverage that would be less comprehensive than their current plans provide.

Finally, if either an all-payer or a single-payer system were combined with effective cost controls, research and development might be impeded and access to new technology reduced. In addition, patients' choices of providers and medical treatments might be restricted.

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CHAPTER I

INTRODUCTION AND BACKGROUND

In March 1990, an estimated 33.4 million people--13.6 percent of the population--lacked health insurance, and these figures probably understate the problem. Estimates for 1987 indicate that the number of people who were uninsured at some time during the year was about 30 percent higher than the number who were not insured during the first quarter of the year. If the same situation held true for 1990, nearly 20 percent of the population under 65 was not covered by insurance at some time during the year, and about 10 percent was uninsured for the entire year. (Insurance coverage for those 65 or older is nearly universal through Medicare.)

The problem of inadequate insurance coverage is exacerbated by the U.S.'s inability to slow the growth of health care costs. Cost increases are raising premiums for health insurance faster than the growth in national income, further eroding coverage. Since 1980, the proportion of the population under 65 without health insurance has increased by 25 percent.

APPROACHES EXAMINED

This study examines two approaches by which the nation might achieve both universal insurance coverage and greater control over health care costs.[1] Both approaches would apply Medicare's payment rates to all physician and hospital services that were covered, while extending health insurance to people who are currently uninsured. One approach would make these changes under an "all-payer" system that would retain the current multiplicity of private and public insurers.

1. Other approaches for increasing insurance coverage are examined in the CBO study *Selected Options for Expanding Health Insurance Coverage* (July 1991). Strategies for cost containment are examined in the CBO study *Rising Health Care Costs: Causes, Implications, and Strategies* (April 1991).

The other approach would introduce a "single payer" that would insure everyone for designated services. Under both approaches, balance billing (physicians' charges above approved payment rates) would be prohibited.

Under an all-payer system, Medicare would be expanded to cover the uninsured, and all other payers would be required to use Medicare's payment rates for those physician and hospital services that were covered. Private health insurance companies would make most health care payments and would still offer their own benefit packages, but the federal government would set their payment rates. Medicaid would continue as a joint federal/state program under which physician and hospital payment rates would be set at Medicare levels. Penalties or prohibitions would be necessary to discourage those currently covered by Medicaid or private insurance from switching to the Medicare program. Such strictures would affect state Medicaid programs, employers now offering health coverage, and individuals with access to employment-based health plans. If these restrictions were not completely effective, national spending for health would not differ much from the illustrations shown here, but the federal government (and Medicare) would account for a larger share of that spending.

Under a single-payer system, the federal government would pay for all basic health care services, applying Medicare's payment rates to all covered physician and hospital services. If such a universal health plan were adopted, the benefit package would have to be specified. This analysis assumes that the universal plan would be actuarially equivalent to the average benefits that private insurers and Medicare currently provide to insured individuals. The plan would cover physician, hospital, and other services typically included in private insurance plans, and it would impose copayment requirements limited by an annual cap. The analysis also assumes that private supplementary insurance for copayment costs under the plan (like today's medigap policies) would be prohibited. Otherwise, costs would be much higher than shown in this study. For those eligible for Medicaid, however, a residual Medicaid program would cover the new plan's copayment requirements and some services not included in the universal plan.

While an all-payer system would maintain the current health insurance structure, a single-payer system would require fundamental changes. Since the government would become the main payer for health care services, the private insurance industry's role would be greatly reduced under the single-payer approach. And because private supplementary coverage of copayment requirements under the universal plan would be prohibited, private insurance could be offered only for services not covered by the universal plan.[2] Consumers would not be able to choose their primary health care plans, as many in the private sector now do. In addition, whatever methods were used to finance the universal plan could dramatically alter who paid for the nation's health care.

Both approaches would give consumers in a given locality more equal access to health care. Because everyone would be covered by insurance at uniform payment rates, providers would have little reason to favor more affluent patients. Both approaches would also permit the government to control the growth of health care prices better. Keeping the rate of price increase down would not control total health care costs, though, unless effective limits on the volume of services were also put in place. While developing effective limits on volume would be straightforward under a single-payer system, limits could also be achieved under an all-payer system if all payers adopted comprehensive and coordinated controls. At some point, however, a trade-off would develop between cost containment and access to quality care.

The estimates presented in this study illustrate the changes in national health expenditures that could result from adopting either an all-payer or single-payer insurance system with universal coverage. The calculations are based on assumptions about a number of factors: payments now made for health care provided to the uninsured; current balance billing amounts; relative payment rates for Medicare, Medicaid, and private payers; changes in the use of services that would result from changes in payment rates and from covering the uninsured; and reductions in administrative costs that would occur under a restruc-

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2. The estimates in Chapter III assume there would be no private health insurance, even for services not covered by the universal plan. If insurance were provided for excluded services, national health expenditures would be a little higher than shown in Chapter III, but the costs of the public plan would be unaffected.

tured health insurance system. Some of these assumptions (discussed in Chapter II) have an empirical basis, but others are little more than educated guesses because data are lacking.

The illustrative effects in this paper are not comparable to the Congressional Budget Office's (CBO's) cost estimates of specific legislative proposals. Cost estimates show the impact on the federal budget, and require much more specificity about the details of the proposals and how they would be put in place. These calculations are meant only to indicate in general terms how adopting an all-payer or a single-payer system that covered the uninsured might affect national spending for health.

MEDICARE'S REIMBURSEMENT POLICIES

Medicare's payment rates to physicians are currently based on past charges, with limits imposed by the Congress on rate increases. Beginning in 1992, however, physicians will be paid under a new Medicare fee schedule.

Under Medicare, hospitals are reimbursed for inpatient services with a preset amount per discharge that depends on the patient's diagnosis and the characteristics of the hospital in which care is provided. Most hospital outpatient services are reimbursed on the basis of reported costs.

Reimbursement for Physician Services

Currently, payment rates for physician services provided under Medicare are determined using a method based on customary, prevailing, and reasonable (CPR) criteria. Payment is the least of actual, customary, and prevailing charges, and the resulting payment is Medicare's allowed charge. The actual charge is the amount that a physician submits to Medicare for a specific service. The customary charge is the fiftieth percentile of the distribution of actual charges that the physician made the previous year for the service. The prevailing charge is the seventy-fifth percentile of the distribution of customary charges among

all physicians providing the service in a given locality, or the 1973 prevailing charge updated to the current year, whichever is lower.

Medicare typically pays 80 percent of the allowed charge above an annual deductible of $100. The enrollee is responsible for the deductible amount and 20 percent of allowed charges above it. In addition, the enrollee is responsible for any balance billing amounts. Physicians can "accept assignment" on claims, which means that they agree to accept the charge Medicare allows as payment in full. There is no balance billing on the 85 percent of charges that are currently assigned, but physicians must collect copayment amounts directly from the patient. Physicians who sign a participation contract agree to accept all Medicare claims on assignment for a specified period of time (typically a year) in return for higher payment rates. They are called participating physicians; those who do not sign are called nonparticipants. Nearly half of all physicians treating Medicare patients signed a participation contract in 1991.

Under the Omnibus Budget Reconciliation Act of 1989, the Congress adopted a preset fee schedule for physician services under Medicare, which is supposed to be in place in January 1992. The fee for a given service will be based on a national standardized amount, adjusted for geographic differences in physicians' costs of practice. Fee schedule amounts for nonparticipating physicians will be 95 percent of those for participants. The new payment plan also limits balance billing. These limits will be phased in so that, by 1993, submitted charges by nonparticipating physicians will be capped at 115 percent of the Medicare fee.

Reimbursement for Hospital Services

The Social Security Amendments of 1983 established the Prospective Payment System (PPS) for reimbursing hospitals for inpatient care under Medicare. Under this system, a hospital is reimbursed with a preset amount per discharge based on a patient's classification in a diagnosis-related group. Hospitals can keep the surplus if their costs are less than payments, but will incur losses on their Medicare services if costs exceed payments. In this way, the PPS provides incentives for

hospitals to control the costs of treating Medicare patients. These incentives did not exist under the previous cost-based reimbursement system.

The PPS was applied to hospitals with their first cost-reporting period beginning on or after October 1, 1983. During the first four years of the program, PPS payments were calculated by combining the hospital's own costs in a previous base year with a blend of regional and national standardized payments. Beginning with the fifth year, payments were based entirely on national standardized amounts. Adjustments to the basic payment rates are made for location in urban or rural areas, the indirect costs of medical education programs, wage rates in the area, unusually long or costly cases, and the proportion of low-income patients treated. Certain types of hospitals, including psychiatric and children's hospitals, and certain types of hospital units, including rehabilitation and psychiatric units in acute care hospitals, are exempt from the PPS and are paid on the basis of their reported costs.

Medicare typically reimburses services provided in hospital outpatient departments on the basis of reported costs. An exception is made for certain surgical procedures, where reimbursement to the facility is a blend of the hospital's reported costs and a prospective facility rate set by Medicare. In addition, radiology and clinical laboratory services provided by hospital outpatient departments are paid on the basis of a fee schedule.

CHAPTER II

FACTORS AFFECTING THE CHANGE IN NATIONAL HEALTH EXPENDITURES

If the uninsured were covered under either an all-payer or a single-payer system that used Medicare's payment rates, the effect on national spending for health would depend on a number of factors. This chapter discusses these factors and explains the assumptions made about them in the estimates presented in Chapter III. Where appropriate, it is indicated whether the assumptions used would tend to bias the estimates in either direction.

CHANGES IN INSURANCE COVERAGE

Under both the all-payer and the single-payer systems examined here, it is assumed that universal health insurance coverage would be achieved. This would be unlikely if any premium payment were required, however, because some people would refuse to buy coverage. Hence, the analysis assumes that taxes would finance the extension of Medicare to the uninsured under the all-payer system and the universal plan under the single-payer system.

Under the all-payer system, it is also assumed that only those who are currently uninsured would take advantage of the extension of Medicare coverage. This assumption would be unrealistic unless prohibitions or penalties were put in place to discourage those who are now covered by Medicaid or private insurance from enrolling in Medicare instead.

If the new Medicare extension were financed entirely from federal taxes, state Medicaid programs would have an incentive to enroll Medicaid recipients in the program, thereby shifting all of the costs of services covered by Medicare to the federal government. Employers would have an incentive to drop their health plans, once free Medicare coverage was available to their employees. Individuals paying even

part of the premium costs for their coverage would also have an incentive to drop it in favor of free Medicare.

Policies that would limit shifts from Medicaid to Medicare might include requiring Medicaid programs to pay a premium equal to the full costs of coverage for any recipients they enrolled in Medicare. Alternatively, enrolling Medicaid recipients in Medicare might simply be prohibited. It would also be necessary, however, to prohibit Medicaid programs from tightening their eligibility standards. Otherwise, current Medicaid recipients could be made eligible for free Medicare coverage by eliminating their Medicaid eligibility.

Policies that would limit shifts from private insurance to Medicare might include a requirement that all firms currently offering employment-based coverage continue to do so. Further, all people with access to employment-based coverage could be prohibited from enrolling in Medicare.

The estimates in Chapter III and IV assume that such restrictive policies would be put in place under the all-payer system and would be completely effective in preventing shifts to Medicare from among the population that currently has coverage. If not, the effects on national health expenditures would be different from those presented in this study. Spending for Medicaid recipients might be lower, for example, if eligibility were restricted so that recipients lost coverage for services now financed by Medicaid but not covered by Medicare. More significantly, the effects on government spending would be quite different from those shown in this study because new enrollment in Medicare could include far more people than just those who are now uninsured.

HEALTH CARE COSTS NOW PAID FOR THE UNINSURED

Under the present system, the typical uninsured patient either is not billed for services, or is billed for treatment but pays only part or none of the charges. State and local governments subsidize hospitals for care provided to the uninsured, but a substantial portion of the original charges go unpaid. However, health care providers do not necessarily absorb the costs of unsponsored care (that is, the amount of unpaid

charges remaining after state and local government subsidies). By charging insured patients more than the costs of the services they use, hospitals and physicians shift some of the costs of caring for the uninsured onto the insured.

The Congressional Budget Office estimates that physicians and community hospitals charged about $25 billion in 1989 for health care provided to the uninsured. Physician services accounted for $10.5 billion of this--with $2.5 billion paid out of pocket by the uninsured and $8.0 billion uncompensated.[1] Care in community hospitals accounted for the remaining $14.5 billion in charges--again with $2.5 billion paid by the uninsured out of pocket and $12.0 billion uncompensated.[2]

For physicians, the $2.5 billion paid out of pocket by the uninsured covered about 24 percent of charges for their care. Community hospitals had about 32 percent of their charges for care to the uninsured covered--$2.5 billion in payments by the uninsured and $2.1 billion in contributions from state and local governments. Hospital costs for the uninsured in 1989 were about 71 percent of charges, or $10.3 billion. Hence, payments to hospitals by or for the uninsured covered about 45 percent of their costs.

Here and in later estimates, the value of services provided in community hospitals is used to approximate the value of hospital services that would be affected by the approaches illustrated in this study. Long-term hospital care (mainly in psychiatric hospitals) would not be affected. Such care is not usually covered by private insurers or by Medicare.

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1. An estimate of total uncompensated physician charges ($9 billion) was obtained from David Emmons, American Medical Association. CBO used this figure to develop uncompensated charges for the uninsured.

2. An estimate of total uncompensated hospital charges ($15.6 billion) was obtained from Irene Fraser, American Hospital Association. CBO used this figure to develop uncompensated charges for the uninsured.

BALANCE BILLING CHARGES NOW PAID FOR PHYSICIAN SERVICES

Both approaches examined in this study would prohibit balance billing. This provision is the only one that would alter health care spending for Medicare enrollees. It would also reduce spending for those with private insurance, although these savings are difficult to estimate and are understated in the illustrative estimates in Chapter III. This provision would not affect spending for Medicaid enrollees because balance billing is already prohibited for this group.

On average, Medicare's payment rates in 1989 were about 25 percent less than charges submitted by physicians on unassigned claims (see Table 1). As a result, balance billing costs for Medicare enrollees were $2.2 billion.[3] Because Medicare has imposed increasingly stringent limits on balance billing since 1989, this amount may overstate the reduction in spending that would result in later years if balance billing were prohibited.

No accurate information is available on balance billing for privately insured patients. Because balance billing costs for the privately insured are so uncertain, amounts saved by eliminating these costs are not included in full in the illustrative estimates presented in Chapter III. Instead, the estimation method effectively reduces balance billing costs by the same proportion as payment rates would be reduced for the privately insured if Medicare's rates were applied to them. Hence, although balance billing costs would be eliminated under the approaches examined here, only a portion of the resulting savings are included in the estimates.

If balance billing were permitted, spending for health would be larger than that shown in Chapter III. Further, physicians might prefer to treat higher income patients, rather than provide the more equal access to care that uniform reimbursement would encourage. Incentives like those under Medicare that encourage physicians to accept its

3. Calculated from Table 1 as the difference between submitted and allowed charges on unassigned claims.

TABLE 1. COMPARISON OF ACTUAL CHARGES AND MEDICARE PAYMENTS FOR PHYSICIAN SERVICES, 1989

	Medicare Submitted Charges (Millions of dollars)	Medicare Allowed Charges (Millions of dollars)	Percentage Difference	Ratio of Medicare Payments to Actual Charges
Assigned Claims	43,600	30,000	31	0.69
Unassigned Claims	8,800	6,600	25	0.75
All Claims	52,400	36,600	30	0.70

SOURCE: Congressional Budget Office calculations from data in *Social Security Bulletin, Annual Statistical Supplement*, 1990.

rates as payment in full, such as higher allowed charges for participating physicians and the certainty of payment for the insurer's portion, might lead many physicians to forgo balance billing, however. Thus, even if balance billing were permitted, amounts collected might not be large.

MEDICARE'S PAYMENT RATES IN RELATION TO THOSE OF PRIVATE PAYERS AND MEDICAID

On average, Medicare pays more per service than Medicaid, but less than providers' actual charges and the amounts paid by private insurers. Applying Medicare's payment rates to all covered physician and hospital services would reduce spending for people who pay charges out of pocket or who are insured privately, and would increase spending for Medicaid recipients.

Because the estimates presented in Chapter III are quite sensitive to alternative assumptions about Medicare's payment rates relative to those of other payers, a range of assumptions is used. The midrange assumptions (for Alternative 2) are based on the evidence presented in

TABLE 2. COMPARISON OF PRIVATE INSURANCE RATES AND MEDICARE PAYMENTS FOR PHYSICIAN SERVICES, 1984

	Blue Shield's Allowed Charge for an Office Visit (Dollars)	Medicare's Allowed Charge for an Office Visit (Dollars)	Percentage Difference	Ratio of Medicare Payments to Private Insurance Rates
Participants	25.87	22.08	15	0.85
Nonparticipants	24.77	20.47	17	0.83
All Physicians	25.50	21.53	16	0.84

SOURCE: J. Mitchell and others, "To Sign or Not To Sign: Physician Participation in Medicare, 1984" (Study prepared for the Health Care Financing Administration by the Center for Health Economics Research, Needham, Mass., April 1987).

this section. Alternative 1 assumes that payments at Medicare's rates would be 5 percent higher than the midrange assumptions, while Alternative 3 assumes that payments would be 5 percent lower than the midrange assumptions.

Comparing Payment Rates For Physician Services

Medicare claims data indicate that Medicare's payment rates are, on average, about 70 percent of physicians' submitted charges (see Table 1). It is assumed that a physician's submitted charge for a given service is the same for all patients, so that payments per service would be lower at Medicare's rates for all those who now pay the full charge out of pocket.

Comprehensive information about rates that private insurers pay for physician services is not available. In a study that compared Medicare and Blue Shield fees for an intermediate office visit using data from the 1984-1985 period, Medicare fees were about 84 percent of Blue Shield fees, on average (see Table 2).[4] It is not known to what

4. J. Mitchell and others, "To Sign or Not To Sign: Physician Participation in Medicare, 1984" (Study prepared for the Health Care Financing Administration by the Center for Health Economics Research, Needham, Mass., April 1987).

extent Blue Shield is representative of other private insurers, or whether an intermediate office visit is a typical service in this context. Further, the average difference may have increased since the study was done. Medicare's payment rates for physician services have risen less since 1984 than the costs of providing these services, while private insurance rates may have risen more rapidly.

Medicare's payment rates are higher than Medicaid's for physician services. According to estimates the Physician Payment Review Commission made, rates for Medicaid were only 69 percent as large as Medicare's prevailing charges, on average, in 1988. After adjusting for the proportion of charges that are paid at less than the prevailing fee, Medicare's rates are an estimated 140 percent of Medicaid's rates.

Comparing Payment Rates For Hospital Services

Because Medicare's methods of reimbursing hospitals for both inpatient and outpatient services differ from the way in which most other insurers set payment, it is difficult to compare Medicare's hospital payment rates for specific services with rates others pay.[5] Instead, relative rates for 1989 are obtained from American Hospital Association (AHA) data by comparing net patient revenues with hospital costs by type of payer (see Table 3). For private payers (mostly insured), costs were 88 percent of payments. For Medicaid patients, costs were 128 percent of payments.

If Medicare's rates were set to cover costs as reported by the AHA and these rates were used by all payers, payments for privately insured patients would fall by 12 percent, and payments for Medicaid patients would rise by 28 percent. These are the midrange assumptions used in Chapter III, but they probably overstate the spending that would result if Medicare's payment rates were applied to all covered services.

5. If Medicare's hospital payment rates were applied to services for the entire population, some rates might have to be adjusted to account for the costs of treating younger patients. The Prospective Payment System payment rates were developed using costs for only Medicare patients, but the costs for non-Medicare patients might be different.

TABLE 3. COMPARISON OF NET PATIENT REVENUES AND COSTS FOR HOSPITAL SERVICES, BY TYPE OF PAYER, 1989

	In Billions of Dollars		Percentage Difference	Ratio of Costs to Revenues
	Net Patient Revenues	Costs		
Private Payers	94.1	83.0	12	0.88
Medicaid	15.2	19.4	-28	1.28

SOURCE: American Hospital Association.

NOTE: Data are for community hospitals only. Excluded are psychiatric, rehabilitation, veterans, and other hospitals whose services are typically not covered by Medicare or private insurance.

As reported by the AHA, expenses are larger than Medicare would recognize because they include items--such as the expenses of running the hospital gift shop and cafeteria--that are not patient-related. Including such unrelated expenses may account for an apparent underpayment of about 9 percent by Medicare in relation to costs reported by the AHA. If the AHA expenses could be reduced to reflect allowable costs under Medicare more accurately, private rates would fall by more than 12 percent and Medicaid rates would increase by less than 28 percent. Hence, the total spending for health care services that would result if Medicare's rates were applied to all covered services might be smaller than shown under each of the alternatives in Chapter III.

CHANGES IN THE VOLUME OF SERVICES PROVIDED

Under both approaches examined in this study, the uninsured and Medicaid recipients would use more medical services because they would have better access to care. It is assumed that privately insured people and Medicare enrollees would also use more services in total because of lower cost-sharing expenses, although some individuals with very generous coverage now would use fewer services under a single-payer system.

The uninsured use less health care than otherwise similar individuals who have health insurance. They receive fewer services in physicians' offices, they are hospitalized less often, and their lengths of stay are shorter than those of the insured. If the uninsured were covered, their use of medical services would probably increase to match that of the insured, thereby adding to national health expenditures. One study indicates that if the uninsured were covered by a typical insurance plan, their use of physician services would increase by 28 percent and their use of hospital services would increase by 32 percent.[6] Another study suggests that the increase could be about twice these amounts.[7] The assumptions used in the illustrative estimates vary across this range.

Raising Medicaid's payment rates to Medicare's levels would also increase the use of health care services by Medicaid recipients. At higher payment levels, physicians and hospitals would be more willing to treat Medicaid recipients. Currently, only about three-quarters of physicians are willing to treat Medicaid patients, while nearly all physicians treat Medicare enrollees. Evidence also indicates that hospitals may discourage physicians from admitting Medicaid patients.[8] The illustrative estimates in Chapter III assume that Medicaid recipients would increase their use of physician and hospital services by only a portion of the increase assumed for the uninsured. The portions used are based on the relative increase in effective payment rates expected for the two groups if Medicare's rates were applied to both.

For both uninsured people and Medicaid recipients, higher physician payment rates might generate some offsetting savings on care that hospital emergency rooms and outpatient departments now provide. Studies have found that the level of physician fees under Medicaid and the use of these alternative sources of care by Medicaid recipi-

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6. Congressional Research Service, *Cost and Effects of Extending Health Insurance Coverage* (October 1988).

7. Stephen H. Long and Jack Rodgers, "The Effects of Being Uninsured on Health Care Service Use: Estimates from the Survey of Income and Program Participation," Survey of Income and Program Participation (SIPP) Working Paper No. 9012, Bureau of the Census (October 1990).

8. Congressional Research Service, *Medicaid Source Book: Background Data and Analysis* (November 1988).

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ents are inversely related.[9] The illustrative calculations do not include any reduction in health spending to account for these effects.

It is assumed that the volume of services privately insured people and Medicare enrollees use would increase overall, although the effects would differ somewhat under a single-payer plan compared with an all-payer system. Under an all-payer system, use of services would increase for virtually everyone in the privately insured and Medicare groups. Because balance billing and (for the privately insured) payment rates would fall, use of services would increase, partly induced by the efforts of physicians to offset their revenue losses. The estimates in Chapter III assume that half of the potential loss in physician revenues from lower payment rates would be offset by higher use of services.[10] This result implicitly assumes that physicians who treat patients insured privately or by Medicare differ from those who treat Medicaid recipients and the uninsured (for whom payments would increase). To the extent that physicians treat a representative mix of patients by type of coverage, fewer physicians would face a revenue loss under the approaches examined here. In this case, the volume offset assumed in the analysis would overstate the increase that would occur in use of services.

While the total volume of services would increase as a result of lower payment rates and an end to balance billing under both all-payer and single-payer approaches, there would be other effects on use of services under a single-payer system because many people would face changes in health plan benefits. In the illustrations discussed in Chapter III, the assumption is that the actuarial value of the universal plan's benefit package would be equivalent to the average value of benefits that private plans and Medicare currently provide. Thus, for those who now have Medicare or private insurance, the average benefit under the universal plan would be the same as the average benefit from their current insurance. Despite this, differences between the

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9. Joel W. Cohen, "Medicaid Policy and the Substitution of Hospital Outpatient Care for Physician Care," *Health Services Research*, vol. 24, no. 1 (April 1989); Stephen H. Long, Russell F. Settle, and Bruce C. Stuart, "Reimbursement and Access to Physicians' Services Under Medicaid," *Journal of Health Economics*, vol. 5 (1986).

10. See Appendix B in the CBO study *Physician Payment Reform Under Medicare* (April 1990) for a discussion and estimates of this offset.

universal benefit package and their current benefit package might induce some people with Medicare or private insurance to change their use of services. The illustrative options assume that any such changes would be offsetting, so that for these two groups changes in plan benefits would cause no change in the use of services.

CHANGES IN THE COSTS OF ADMINISTRATION

In this study, administrative costs include overhead expenses for health care providers as well as for health insurers. Administrative costs of public programs are included in insurers' overhead.

Insurers' administrative costs for those who are currently insured would not change under an all-payer system, but would fall under a single-payer plan after the system was fully in place. Providers' overhead expenses (as a percentage of personal health expenditures at given payment rates) would typically decrease under both approaches, but would fall more under a single-payer system. Transitional costs associated with changing from the current payment system, which could be substantial, are ignored in this analysis.

Under an all-payer system, claims administration by insurers would be no easier--and hence no less costly--than now because the only difference would be the rates paid for services. The current multiplicity of insurers would still exist, with the same need for private insurers to market their products, coordinate payments with other insurers, and make a profit. Hence, the administrative costs of insurers would not change for those now covered, and would increase slightly in total because Medicare coverage would be extended to the uninsured, which would raise the number of claims to be processed. Although insurers' costs might drop a little because they would no longer need to establish payment rates for physician and hospital services, these potential savings are not included in the estimates.

It is assumed that there would be some reduction in providers' overhead costs under an all-payer system. With uniform payment rates, the handling of claims would be more standardized. Further, because everyone would have insurance coverage and patients' copay-

ment amounts could be assessed and collected at the time of service, the costs that providers incur in collecting bad debts would decrease. The savings under an all-payer system would be less than those under a single-payer system, however, because providers would still have to deal with many different insurers. For purposes of the illustrations, the assumption is that any savings on providers' overhead under an all-payer system would be half as large as those under a single-payer system.

Under a single-payer system, the consolidation of numerous private insurance plans and government health programs into one insurance system for basic coverage would reduce total expenses for insurance overhead. Under a universal health plan, determining eligibility would be inexpensive, since essentially everyone would be covered continuously under the same plan. There would no longer be any costs for marketing or assessing risk to calculate premiums. Paying claims would be simplified because only one set of reimbursement rules would apply, and there would be no need to coordinate among multiple insurers. Further, no profit would be claimed under a public plan.

In 1989, insurers' costs of administration (including overhead for public programs) were about 6.7 percent of personal health expenditures (PHE). The illustrative estimates in Chapter III assume these costs would fall to about 2.4 percent of PHE under a single-payer system. This result rests on two assumptions. First, it assumes that, in relation to the value of services covered, administrative costs for the single payer would be the same as they were under Medicare in 1989--about 1.9 percent. Because only about 70 percent of PHE represents services that would be covered under the single-payer system examined here, the single payer's overhead expenses, relative to PHE, would be nearly 1.4 percent.[11] The second assumption is that all administrative costs for public health programs other than Medicare would be unchanged. These other administrative costs--which now represent about 1 percent of PHE--are for Medicaid, Workers' Compensation, and veterans' programs, among others. Administrative costs for the residual Medicaid program that would continue under the

11. Services that would be covered under the single-payer plan are approximated by the sum of current benefits under private insurance, Medicare, and Medicaid (exclusive of long-term care), together with associated cost-sharing amounts.

single-payer system would be unchanged from current costs because Medicaid programs would have to determine eligibility for the same number of recipients and would have at least as many claims to process (although they would pay only copayment costs for physician and hospital services). Administrative costs for other public health programs would probably not change unless they were eliminated or significantly altered.

Because providers would no longer have to deal with multiple insurers under a single-payer system, their overhead costs would decrease by more than they would under an all-payer system. CBO estimates derived from studies of the Canadian system indicate that providers' costs of administration could be reduced by up to 6.8 percent of PHE if the United States adopted a single-payer system.[12] Because some administrative expenses eliminated in the Canadian system (for tracking hospital costs at the individual patient level) would remain under Medicare's hospital payment methods, this study assumes that a single-payer system would yield, at most, only half of the estimated savings on hospital overhead that would result under a Canadian-style system, while all the estimated savings on physicians' overhead would occur under the most optimistic set of assumptions.

But even this adjusted estimate of savings on providers' overhead under the single-payer system examined here could be too high for two reasons. First, by contrast with the Canadian system, where copayments are virtually nonexistent, providers would still have to collect copayment amounts, either from patients or from the residual Medicaid program. These costs would be minimal for non-Medicaid patients, though, if they were collected at the time of service. Second, to realize all of the potential savings on providers' overhead, providers would have to reduce their costs by the full amount and Medicare's payment rates would have to be reduced accordingly. To account for these factors, the illustrative estimates for the single-payer system use three alternative assumptions: that no savings on providers' overhead would be captured; that half of the potential savings would be realized; and that all of the potential savings would be achieved.

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12. See Appendix A for a summary of the results from recent studies of the Canadian system.

CHAPTER III

ILLUSTRATIVE CHANGES IN NATIONAL HEALTH EXPENDITURES

This chapter develops estimates of the effects of an all-payer or single-payer system that would cover the uninsured and apply Medicare's payment rates to all covered physician and hospital services. The estimates illustrate how national health expenditures might have changed for 1989 if one of these systems had been in place. Because there is considerable uncertainty about the factors underlying these effects, this study presents three sets of estimates, ranging from relatively pessimistic (Alternative 1) to relatively optimistic (Alternative 3) about the net effect on health expenditures. The three alternatives reflect different assumptions about the level of Medicare's payment rates relative to those of other payers, the amount by which use of services would change for Medicaid recipients and the uninsured, and how much of a reduction in the overhead expenses of providers could be captured (see Table 4).

The three alternatives examined share some common assumptions. All assume that the volume of physician services would increase to offset 50 percent of any reduction in revenues that might result from lower payment rates. Balance billing would be prohibited under both the all-payer and single-payer approaches. Universal coverage would be achieved under both approaches, either by extending Medicare to the uninsured or by covering everyone under a universal plan. Under the all-payer approach, it is assumed that only those currently without health coverage would take advantage of the option to enroll in Medicare; those with Medicaid or private insurance would not switch to Medicare. Under the single-payer approach, private insurance would be prohibited from covering the copayments required by the universal health plan, but a residual Medicaid program would continue to supplement benefits for those eligible.

Some of the assumptions underlying the estimates for all three alternatives tend to understate the savings and hence overstate the total amount that would be spent on health, as discussed in Chapter II. For example, in the case of those who are privately insured, the savings that would result from eliminating balance billing are certainly understated. Further, the assumptions probably understate the reduction in hospital payment rates that the privately insured would obtain under Medicare's payment schedule, and overstate the increase in hospital rates for Medicaid recipients.

TABLE 4. ALTERNATIVE SETS OF ASSUMPTIONS FOR ILLUSTRATING THE CHANGE IN NATIONAL HEALTH EXPENDITURES

	Alternative 1	Alternative 2	Alternative 3
Payment Rates for Physician Services			
Medicare Rates as a Percentage of Actual Charges	73.5	70.0	66.5
Medicare Rates as a Percentage of Private Insurance Rates	88.2	84.0	79.8
Medicare Rates as a Percentage of Medicaid Rates	147.0	140.0	133.0
Payment Rates for Hospital Services			
Medicare Rates as a Percentage of Actual Charges	74.7	71.2	67.6
Medicare Rates as a Percentage of Private Insurance Rates	92.4	88.0	83.6
Medicare Rates as a Percentage of Medicaid Rates	134.4	128.0	121.6

(Continued)

For other reasons, however, the results may understate total spending for health. First, the analysis considers only changes in the use of covered physician and hospital services, which account for about 85 percent of the value of all services Medicare and private insurers typically cover. Spending for all other health services is assumed not to change, and this assumption may not be valid. Greater use of physician services could lead to increased use of other health care services--prescription drugs or nursing home care, for instance--whether or not insurance covered those other services. The second reason for

TABLE 4. Continued

	Alternative 1	Alternative 2	Alternative 3
Expanded Use of Services (Percentage Increase)			
Uninsured			
Physician	56.0	42.0	28.0
Hospital	64.0	48.0	32.0
Medicaid			
Physician	23.5	15.7	9.1
Hospital	19.8	12.7	6.9
Overhead Costs (Percentage of PHE)			
All-Payer System			
Providers	15.0	13.3	11.6
Insurers[a]	6.5	6.6	6.7
Single-Payer System			
Providers	15.0	11.6	8.2
Insurers[a]	2.4	2.4	2.4

SOURCE: Congressional Budget Office.

NOTE: PHE = personal health expenditures.

a. Medicare's administrative rate--1.9 percent of the value of covered services--is assumed for the extension of Medicare to the uninsured under the all-payer system and for the single payer. Under the all-payer system, there would be additional overhead costs for both private insurers and public programs. Under the single-payer system, there would be no overhead costs for private insurers but administrative costs for some public health programs would remain.

possible understatement of national spending for health would apply only to results for a single-payer system. Although private insurers could offer coverage for services excluded from the universal plan, the estimates do not incorporate the additional overhead costs for insurers and the greater use of services that such coverage would generate. Any increase in national health spending attributable to private insurance would be small, though, because the services private insurance could cover would be so limited. Private insurance would not affect the costs of the universal plan as long as private coverage was not offered for copayment costs under the plan.

EFFECTS ON SPENDING FOR PHYSICIAN AND HOSPITAL SERVICES

Before allowing for changes in providers' overhead expenses, the estimated effects on spending for health care services would be the same under either an all-payer or a single-payer system that covered the uninsured. If Medicare's payment rates were applied to all covered physician and hospital services, accompanied by a prohibition on balance billing, the calculations presented here indicate that expenditures for those services could rise by as much as 12 percent (Alternative 1) or be virtually unchanged (Alternative 3).

Changes in Spending for Physician Services

Spending on physician services that would be affected by the approaches illustrated here could increase by as much as $6.7 billion, although under optimistic assumptions the increase would be negligible (see Table 5).[1] Actual spending for affected physician services in 1989 was $110.1 billion. At Medicare's rates, payments to physicians would be between $110.1 billion and $116.8 billion. The change would be the net result of paying higher rates for the uninsured and Medicaid recipients, paying less for the privately insured and Medicare enrollees, and providing more services to all groups.

1. See Appendix B for the calculations underlying the estimates in this section.

TABLE 5. ILLUSTRATIVE CHANGES IN SPENDING FOR COVERED PHYSICIAN SERVICES, 1989 (In billions of dollars)

Spending	Uninsured[a]	Medicaid[b]	Privately Insured[c]	Medicare[d]	Total
			Alternative 1		
Actual Spending	2.5	2.5	63.9	41.2	110.1
Estimated Spending at Medicare Rates	12.0	4.5	60.2	40.1	116.8
Change	9.5	2.0	-3.8	-1.1	6.7
			Alternative 2		
Actual Spending	2.5	2.5	63.9	41.2	110.1
Estimated Spending at Medicare Rates	10.4	4.1	58.8	40.1	113.4
Change	7.9	1.6	-5.1	-1.1	3.3
			Alternative 3		
Actual Spending	2.5	2.5	63.9	41.2	110.1
Estimated Spending at Medicare rates	8.9	3.6	57.5	40.1	110.1
Change	6.4	1.1	-6.5	-1.1	0

SOURCE: Congressional Budget Office estimates based on data from the Health Care Financing Administration and from the 1988 Socioeconomic Monitoring System as reported by David Emmons, American Medical Association, personal communication.

NOTE: The calculations are made using the assumptions in Table 4, which defines the alternatives.

a. Assumes that those without insurance pay $2.5 billion out of pocket for physician services.

b. Actual spending includes $4.2 billion in Medicaid benefits minus $1.7 billion Medicaid pays for Medicare enrollees' copayment costs.

c. Actual spending includes $78.4 billion in total consumer payments minus $12 billion in cost-sharing amounts paid by Medicare enrollees minus $2.5 billion in out-of-pocket payments by the uninsured.

d. Actual spending includes $27.5 billion in Medicare benefits plus $13.7 billion in cost-sharing amounts paid by enrollees.

The Uninsured. If coverage for physician services were extended to the uninsured, spending would rise by between $6.4 billion and $9.5 billion. Different assumptions about the cost of the care that the uninsured now use, and about the increase in their use of health care if they had coverage, account for the differences among the estimates.

If the uninsured were covered, either under Medicare or a new universal plan, national health expenditures would rise because most of the charges by physicians for treating the uninsured (an estimated $10.5 billion) now go unpaid ($8 billion). Physicians may recover some of their uncompensated costs by increasing charges for privately insured patients, but the amount of such cost-shifting is unknown.

Health spending would increase if the uninsured were covered, not only because payments would be made for care that is now uncompensated, but also because those who are currently uninsured would increase their use of medical services. The estimates here assume three different increases in the use of services for the uninsured, as noted in Chapter II. Alternative 1 assumes that spending on physician services by the currently uninsured would rise by 56 percent, Alternative 2 assumes the increase would be 42 percent, and Alternative 3 assumes a 28 percent rise.

Medicaid Recipients. In the illustrative calculations, spending on physician services for those currently covered by Medicaid would increase by between $1.1 billion and $2.0 billion if Medicare's payment rates were used for services provided to them. Actual spending on physician services for Medicaid recipients who were not also Medicare enrollees was $2.5 billion in 1989. At Medicare's payment rates, spending on physician services for Medicaid recipients would be between $3.6 billion and $4.5 billion. The differences in estimated spending at Medicare's rates stem from different assumptions about the level of Medicare's payment rates compared with those Medicaid now pays and about the expected increase in the use of physician services by Medicaid recipients.

Applying Medicare's payment rates to those covered by Medicaid would increase payments for the services they now use. Based on survey results reported by the Physician Payment Review Commission,

CBO estimates that the average ratio of Medicare's fees to Medicaid's is about 1.4 to 1.0.[2] To account for possible error in this estimate, each alternative assumes a different ratio: 1.47 for Alternative 1, 1.40 for Alternative 2, and 1.33 for Alternative 3.

Higher payment rates would also increase the volume of services Medicaid recipients use because providers would be more willing to treat them. Alternative 1 assumes that recipients would use about 24 percent more physician services than they do now; Alternative 2 assumes that the increase would be nearly 16 percent; and Alternative 3 assumes a 9 percent increase.

The Privately Insured. If Medicare's payment rates were applied to the privately insured, expenditures for physician services to this group would decrease by between $3.8 billion and $6.5 billion. This assumes that half of the potential reduction in revenues resulting from lower payment rates would be offset by an increase in services. Physician services for the privately insured actually cost $63.9 billion in 1989. At Medicare's rates, spending would range from $57.5 billion to $60.2 billion. The difference in estimated spending at Medicare's rates results entirely from different assumptions about how much lower Medicare's payment rates are than private insurers' rates.

Medicare Enrollees. Because of the prohibition on balance billing, spending for Medicare enrollees would be affected as well. In 1989, balance billing amounts under Medicare totaled $2.2 billion. Elimination of balance billing would reduce spending for physician services that are covered by Medicare by $1.1 billion, under the assumption that half of the reduction in balance billing would be offset by increased use of services.

Changes in Spending for Hospital Services

Expenditures for hospital services affected by a change in payment rates would increase by between $0.2 billion and $18.9 billion if Medicare's rates were applied to all covered hospital services (see Table 6).[3]

2. Physician Payment Review Commission, *Annual Report to Congress*, 1991, Chapter 15.

Spending for those hospital services was $177.7 billion in 1989. Under Medicare's payment rates, such expenditures would increase to between $177.9 billion and $196.6 billion. Higher spending for the uninsured and Medicaid recipients--the result of higher payment rates and increased use of services--would more than offset the savings from lower payment rates for the privately insured.

The Uninsured. Covering the uninsured under Medicare's payment rates would increase spending on hospital services by between $8.3 billion and $13.1 billion. These estimates are based on the costs of hospital services the uninsured now use and on the expected increase in their use of those services if they had coverage.

In 1989, charges for hospital care to the uninsured were estimated to be $14.5 billion. Of this amount, only $4.6 billion was paid: $2.5 billion out of pocket by the uninsured and $2.1 billion in subsidies from state and local governments. The costs of hospital services used by the uninsured were estimated to be $10.3 billion, so that less than half of these costs were paid. The estimates assume that costs would be fully paid at Medicare's rates, but the alternatives allow for an estimating error of plus or minus 5 percent.

Spending for the uninsured would increase not only because the costs of services they now use would be paid, but also because they would use more services if they had insurance coverage. Alternative 1 assumes that spending on hospital services for the currently uninsured would rise by 64 percent; Alternative 2 assumes an increase in hospital spending of 48 percent; and Alternative 3 assumes an increase of 32 percent.

Medicaid Recipients. Applying Medicare's payment rates to those who currently receive Medicaid benefits would increase hospital spending by between $6.1 billion and $12.4 billion. Expenditures for hospital services used by Medicaid recipients who were not also Medicare enrollees were $20.3 billion in 1989. If Medicare's payment rates were

3. See Appendix C for the calculations underlying the estimates in this section.

TABLE 6. ILLUSTRATIVE CHANGES IN SPENDING FOR COVERED HOSPITAL SERVICES, 1989 (In billions of dollars)

Spending	Uninsured[a]	Medicaid[b]	Privately Insured[c]	Medicare[d]	Total
			Alternative 1		
Actual Spending	4.6	20.3	86.8	66.1	177.7
Estimated Spending at Medicare Rates	17.7	32.6	80.2	66.1	196.6
Change	13.1	12.4	-6.6	0	18.9
			Alternative 2		
Actual Spending	4.6	20.3	86.8	66.1	177.7
Estimated Spending at Medicare Rates	15.2	29.2	76.4	66.1	186.9
Change	10.6	9.0	-10.4	0	9.2
			Alternative 3		
Actual Spending	4.6	20.3	86.8	66.1	177.7
Estimated Spending at Medicare Rates	12.9	26.3	72.5	66.1	177.9
Change	8.3	6.1	-14.2	0	0.2

SOURCE: Congressional Budget Office estimates based on data from the Health Care Financing Administration and from the 1989 survey of hospitals as reported by Irene Fraser, American Hospital Association, personal communication.

NOTE: The calculations are made using the assumptions in Table 4, which defines the alternatives.

a. Actual spending includes $2.5 billion paid out of pocket plus $2.1 billion in state and local government subsidies to community hospitals for care to the uninsured.

b. Actual spending includes $22.9 billion in Medicaid benefits minus $0.6 billion in cost-sharing amounts paid by Medicare enrollees minus $2 billion for hospital services that would not be affected.

c. Actual spending includes $96.9 billion in total consumer payments minus $3.4 billion in cost-sharing amounts paid by Medicare enrollees minus $2.5 billion in out-of-pocket payments by the uninsured minus $4.2 billion for hospital services that would not be affected.

d. Actual spending includes $62.1 billion in Medicare benefits plus $4 billion in cost-sharing amounts paid by enrollees.

used, this amount would increase to between $26.3 billion and $32.6 billion. Differing assumptions about the ratio of Medicare and Medicaid payment rates for hospital services and about the increase in hospital use resulting from the higher rates generate the different estimates. Three different values are used for the ratio of Medicare's rates to Medicaid's: 1.34 for Alternative 1, 1.28 for Alternative 2, and 1.22 for Alternative 3. In addition, Alternative 1 assumes an increase in use of services of about 20 percent; Alternative 2 assumes a 13 percent increase; and Alternative 3 assumes a 7 percent increase.

The Privately Insured. Expenditures for hospital services for the privately insured would decrease by between $6.6 billion and $14.2 billion if Medicare's payment rates were applied to them. Spending at Medicare's rates would be between $72.5 billion and $80.2 billion. Different assumptions about Medicare's rates compared with private insurance rates for hospital services account entirely for the difference in the estimates. Alternative 1 assumes that Medicare's rates are about 92 percent of private rates, Alternative 2 assumes they are 88 percent of private rates, and Alternative 3 assumes they are about 84 percent of private rates. Unlike the case for physicians, it is not assumed that hospitals' loss in revenues from lower payment rates would be partially offset by an increase in the volume of services they provide.

Medicare Enrollees. Spending on hospital services for Medicare enrollees would be unchanged. In 1989, this spending--including copayment costs paid by enrollees--was $66.1 billion.

EFFECTS ON ADMINISTRATIVE COSTS

The effects on administrative costs--for both providers' and insurers' overhead--would be different for all-payer and single-payer systems.[4] Because savings for providers on overhead expenses would permit a reduction in Medicare's payment rates, the overall effect on payments to providers would also be different for the two systems.

4. See Appendix D for the calculations underlying the estimates in this section.

Under both systems, overhead expenses for providers could be lower because universal insurance coverage at uniform rates would reduce the costs of collecting payment for services rendered. The estimates assume, however, that the maximum potential savings on providers' overhead under an all-payer system would be only half the maximum savings possible under a single-payer system.[5] This assumption reflects the extra costs involved in dealing with multiple insurers, each with its own requirements for obtaining payment. For each option, the alternatives differ in how much of the maximum potential savings in providers' overhead expenses would be realized and claimed for payers through lower payment rates. Alternative 1 assumes that none of the potential savings would be realized and that, instead, providers' overhead costs would rise somewhat because of the expected increase in services. Alternative 2 assumes that half of the maximum potential savings on providers' overhead would be captured. Alternative 3 assumes that all of it would be realized.

No savings would be expected on overhead expenses for insurers under an all-payer system, while substantial savings would be expected under a single-payer system. The estimates assume that insurers' overhead costs would drop, as a percentage of personal health expenditures, from 6.7 percent to 2.4 percent under a single-payer system. These assumptions about overhead expenses for insurers do not vary for the three alternatives.

Under an all-payer system, changes in overhead expenses for providers and insurers combined would range from an increase of $4.4 billion to a decrease of $17.5 billion (see Table 7). While providers' overhead expenses would decrease significantly under all but Alternative 1, overhead expenses for insurers would increase slightly under all the alternatives as a result of covering the uninsured.

Under a single-payer system, changes in overhead costs would range from a net decrease of $18.2 billion to a decrease of $58.3 billion (see Table 8). Providers' overhead expenses would fall substantially

5. The maximum estimated savings on providers' overhead expenses under a single-payer system would equal 6.8 percent of personal health expenditures (PHE). In the aggregate, overhead expenses would fall from 15 percent of PHE to 8.2 percent.

TABLE 7. ILLUSTRATIVE CHANGES IN ADMINISTRATIVE COSTS AS A RESULT OF ADOPTING AN ALL-PAYER SYSTEM, 1989
(In billions of dollars)

Spending	Providers' Overhead[a]	Insurers' Overhead[b]	Total
	Alternative 1		
Actual Spending	79.5	35.3	114.8
Estimated Spending at Medicare Rates	83.3	35.9	119.2
Change	3.8	0.6	4.4
	Alternative 2		
Actual Spending	79.5	35.3	114.8
Estimated Spending at Medicare Rates	72.1	35.8	108.0
Change	-7.3	0.5	-6.8
	Alternative 3		
Actual Spending	79.5	35.3	114.8
Estimated Spending at Medicare Rates	61.5	35.7	97.3
Change	-17.9	0.4	-17.5

SOURCE: Congressional Budget Office estimates based on data from the Health Care Financing Administration.

NOTE: The calculations are made using the assumptions in Table 4, which defines the alternatives.

a. For hospitals, includes costs of all administrative personnel and of accounting and billing departments; excludes costs of medical personnel, research, education, supplies, rents, capital, insurance, and taxes. For physicians, includes all expenses (gross revenues less physicians' net income). These costs are part of payments to providers. They appear in the national health expenditure accounts as part of providers' revenues, and they are included in the amounts shown in Tables 5 and 6.

b. Includes all costs related to the provision of insurance except for benefit payments. The increase reflects the administrative costs of covering the uninsured.

TABLE 8. ILLUSTRATIVE CHANGES IN ADMINISTRATIVE COSTS AS A RESULT OF ADOPTING A SINGLE-PAYER SYSTEM, 1989 (In billions of dollars)

Spending	Providers' Overhead[a]	Insurers' Overhead[b]	Total
	Alternative 1		
Actual Spending	79.5	35.3	114.8
Estimated Spending at Medicare Rates	83.3	13.2	96.5
Change	3.8	-22.1	-18.2
	Alternative 2		
Actual Spending	79.5	35.3	114.8
Estimated Spending at Medicare Rates	63.0	13.1	76.0
Change	-16.5	-22.2	-38.7
	Alternative 3		
Actual Spending	79.5	35.3	114.8
Estimated Spending at Medicare Rates	43.6	12.9	56.5
Change	-35.9	-22.4	-58.3

SOURCE: Congressional Budget Office estimates based on data from the Health Care Financing Administration.

NOTE: The calculations are made using the assumptions in Table 4, which defines the alternatives.

a. For hospitals, includes costs of all administrative personnel and of accounting and billing departments; excludes costs of medical personnel, research, education, supplies, rents, capital, insurance, and taxes. For physicians, includes all expenses (gross revenues less physicians' net income). These costs are part of payments to providers. They appear in the national health expenditure accounts as part of providers' revenues, and they are included in the amounts shown in Tables 5 and 6.

b. Includes all costs related to the provision of insurance except for benefit payments. These calculations assume that the current ratio of administrative costs to the value of services covered under Medicare would be maintained under a single-payer system.

under all but Alternative 1, and insurers' overhead costs would fall--by $22 billion or more--under all three alternatives.

EFFECTS ON NATIONAL HEALTH EXPENDITURES

If Medicare's rates were paid for all physician and hospital services covered under an all-payer system, national health expenditures might increase by as much as $30 billion or fall by as much as $17.3 billion; that is, the change would be between 5 percent and -2.9 percent of national health expenditures (see Table 9). Under a single-payer system, the change would be between $7.4 billion and -$58.1 billion, or between 1.2 percent and -9.6 percent of national health expenditures (see Table 10).

The change in national health expenditures would be the net result of changes in overhead costs for insurers (including public programs) and changes in payments to providers. Any reduction in providers' overhead expenses that were captured by payers through lower rates, as well as current differences between Medicare's payment rates and those of other payers, would determine the changes in payments to providers.

Under either an all-payer or a single-payer system, payments for health care services (before allowance for changes in providers' overhead expenses) could increase by as much as $25.6 billion, or 12.3 percent, using pessimistic assumptions about current rate differences and expected increases in use of services. Under optimistic assumptions, payments for services would increase by only $0.2 billion.

Under an all-payer system, after allowing for the effects on payments of changes in providers' overhead expenses, the increase in payments would be slightly higher under Alternative 1 and lower under Alternative 2. Payments would decrease under Alternative 3. Because changes in insurers' overhead would be so small under this approach, the effects on national health expenditures would be nearly the same as the effects on payments to providers.

TABLE 9. ILLUSTRATIVE CHANGES IN NATIONAL HEALTH EXPENDITURES AS A RESULT OF ADOPTING AN ALL-PAYER SYSTEM, 1989 (In billions of dollars)

Spending	Payments to Affected Providers[a]			Insurers' Overhead[b]	All Other Spending[c]	Total
	Service Component	Overhead Component	Total			
Alternative 1						
Actual Spending	208.4	79.5	287.9	35.3	281.0	604.1
Estimated Spending at Medicare Rates	234.0	83.3	317.3	35.9	281.0	634.1
Change	25.6	3.8	29.4	0.6	0	30.0
Alternative 2						
Actual Spending	208.4	79.5	287.9	35.3	281.0	604.1
Estimated Spending at Medicare Rates	220.9	72.1	293.0	35.8	281.0	609.8
Change	12.5	-7.3	5.2	0.5	0	5.6
Alternative 3						
Actual Spending	208.4	79.5	287.9	35.3	281.0	604.1
Estimated Spending at Medicare Rates	208.6	61.5	270.1	35.7	281.0	586.8
Change	0.2	-17.9	-17.8	0.4	0	-17.3

SOURCE: Congressional Budget Office estimates based on Tables 5, 6, and 7, and data from the Health Care Financing Administration.

NOTE: The calculations are made using the assumptions in Table 4, which defines the alternatives.

a. Includes all Medicare spending plus all other spending for covered physician and hospital services.

b. The increase reflects the administrative costs of covering the uninsured.

c. Includes spending for physician and hospital services not included elsewhere, dental and other professional services, drugs and other medical nondurable items, nursing homes, home health care, durable medical equipment, other professional services, research, and construction. These amounts were assumed to remain the same.

TABLE 10. ILLUSTRATIVE CHANGES IN NATIONAL HEALTH EXPENDITURES AS A RESULT OF ADOPTING A SINGLE-PAYER SYSTEM, 1989 (In billions of dollars)

Spending	Payments to Affected Providers[a]			Insurers' Overhead[b]	All Other Spending[c]	Total
	Service Component	Overhead Component	Total			
Alternative 1						
Actual Spending	208.4	79.5	287.9	35.3	281.0	604.1
Estimated Spending at Medicare Rates	234.0	83.3	317.3	13.2	281.0	611.5
Change	25.6	3.8	29.4	-22.1	0	7.4
Alternative 2						
Actual Spending	208.4	79.5	287.9	35.3	281.0	604.1
Estimated Spending at Medicare Rates	220.9	63.0	283.8	13.1	281.0	577.9
Change	12.5	-16.5	-4.0	-22.2	0	-26.3
Alternative 3						
Actual Spending	208.4	79.5	287.9	35.3	281.0	604.1
Estimated Spending at Medicare Rates	208.6	43.6	252.2	12.9	281.0	546.0
Change	0.2	-35.9	-35.7	-22.4	0	-58.1

SOURCE: Congressional Budget Office estimates based on Tables 5, 6, and 8, and data from the Health Care Financing Administration.

NOTE: The calculations are made using the assumptions in Table 4, which defines the alternatives.

a. Includes all Medicare spending plus all other spending for covered physician and hospital services.

b. Includes the administrative costs of covering the uninsured, and reductions in administrative costs for current Medicaid recipients and the privately insured.

c. Includes spending for physician and hospital services not included elsewhere, dental and other professional services, drugs and other medical nondurable items, nursing homes, home health care, durable medical equipment, other professional services, research, and construction. These amounts were assumed to remain the same.

Under a single-payer system, changes in providers' overhead expenses would lead to a reduction in payments to providers for Alternatives 2 and 3, while the change in payments for Alternative 1 would be the same as under the all-payer approach. Savings on insurers' overhead expenses would also be substantial--about $22 billion. Hence, for each of the alternatives, the effects on national health expenditures would be more favorable than those under an all-payer system.

If private insurers were permitted to offer supplementary (medigap-type) coverage for copayment costs under the universal plan, the effects on spending for health under a single-payer system would be far less favorable than those shown in Table 10. In fact, any savings shown would be entirely eliminated because current evidence indicates that use of services would increase for those with such supplementary coverage by about 24 percent.[6] If most of the covered population bought a supplement, national health expenditures would be about $56 billion higher under Alternative 2, for example, instead of lower by $26.3 billion. Even if only half the covered population bought a supplement, spending would be about $34 billion higher, not lower, under Alternative 2.

6. See Willard Manning and others, "Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment," *American Economic Review*, vol. 77, no. 3 (June 1987), Table 5. Also see Sandra Christensen, Stephen H. Long, and Jack Rodgers, "Acute Health Care Costs for the Aged Medicare Population: Overview and Policy Options," *Milbank Quarterly*, vol. 65, no. 3 (1987), Table B-3.

CHAPTER IV
OTHER CONSIDERATIONS

The estimates in Chapter III suggest that if the nation adopted either an all-payer or single-payer system that paid providers at Medicare's rates, the population that is currently uninsured could be covered without dramatically increasing national spending on health. In fact, all U.S. residents might be covered by health insurance for roughly the current level of spending or even somewhat less, because of savings in administrative costs and lower payment rates for services used by the privately insured. The prospects for controlling the growth of health care expenditures in future years would also be improved under either system.

Why then does the United States retain its complex and costly system of health insurance? One reason is that adopting either an all-payer or a single-payer system would be a big change, one that would generate substantial costs during the transition and have profound and sometimes negative effects over the longer run. Government's role as a health insurer would increase, thereby reducing the market for private insurance. Resources would be redistributed among consumers, providers, and those employed in the health care sector. Further, if an all-payer or a single-payer system were combined with other effective cost-control mechanisms, some of the advantages of the current health insurance system--at least for those with coverage--might be undermined. Current advantages include ready access to care, unrestricted choice of providers and treatment alternatives, and rapid development and dissemination of new technologies.

EXPANDING THE ROLE OF GOVERNMENT AS A HEALTH INSURER

Even if national health expenditures decreased, government costs (and hence taxes to finance them) would increase under either of the ap-

proaches this study examines. Higher public costs, however, would be offset by reduced private-sector spending. Expansion of the government sector--and the corresponding contraction of the private insurance sector--would be much larger under a single-payer system than under an all-payer system, but the potential for reducing national health expenditures would also be greater.

For ease of exposition, the midrange assumptions of Alternative 2 (from Chapter III) are used to discuss the effects of expanding the role of government as a health insurer. Effects are shown for all three alternatives, however, to give some idea of the uncertainty associated with these illustrative estimates (see Table 11). The calculations treat the premiums paid by Medicare enrollees (about $12.3 billion in 1989) as government revenues--a form of tax--rather than as private-sector payments.

TABLE 11. ILLUSTRATIVE EFFECTS ON SPENDING FOR HEALTH BY GOVERNMENT, THE PRIVATE SECTOR, AND NATIONWIDE, 1989

	Government		Private Sector		Nationwide	
	Billions of Dollars	Percentage Change	Billions of Dollars	Percentage Change	Billions of Dollars	Percentage Change
			All-Payer System			
Alternative 1	39.4	15.6	-9.4	-3.2	30.0	5.0
Alternative 2	25.6	10.1	-20.0	-6.7	5.6	0.9
Alternative 3	12.9	5.1	-30.2	-10.2	-17.3	-2.9
			Single-Payer System			
Alternative 1	173.7	68.6	-166.4	-55.9	7.4	1.2
Alternative 2	143.6	56.7	-169.9	-57.1	-26.3	-4.3
Alternative 3	115.1	45.5	-173.3	-58.2	-58.1	-9.6

SOURCE: Congressional Budget Office estimates based on Tables 9 and 10.

All-Payer System

Under the all-payer system examined in this study, government spending for health would increase by about $25.6 billion, or 10.1 percent, using the midrange assumptions of Alternative 2, and including an assumption that only those who are currently uninsured would take advantage of the option to enroll in Medicare. Of this increase, $23.3 billion would be federal spending, and the rest would be state spending. Federal spending would increase for Medicare because of its extension to the uninsured, and for Medicaid because payment rates would be higher. State spending would increase for Medicaid, but this increase would be partly offset by eliminating payments to hospitals for uncompensated care.

If these additional government costs for health care were financed through taxes, tax bills would be about $100 higher per capita in 1989. Nearly 80 percent of this increase in taxes, however, would be offset by lower private health care payments. The population as a whole would pay about $22 more per capita for universal health insurance coverage under an all-payer system, if the midrange assumptions used here were correct. Those who would pay most of the additional costs, though, might not receive most of the additional benefits.

An all-payer system would not greatly change the private insurance industry. Private insurers would continue to provide coverage for basic medical services to those who are now privately insured, but the federal government would set their payment rates for hospital and physician services. Because these rates would typically be lower than the rates they pay now, insurers could either reduce premiums or increase benefits for their insured populations, thereby passing the benefits on to consumers. If insurers increased their profits instead, the mismatch in the distribution of benefits and costs that might occur under this approach would be greater.

Single-Payer System

Under a single-payer system (again using the midrange assumptions of Alternative 2), government spending for health would increase by

$143.6 billion, or 56.7 percent. Federal spending would increase by $154.7 billion, offset by an $11.1 billion reduction in state spending. These results assume that states would retain financial responsibility for their portion of the costs of a residual Medicaid program. In that case, Medicaid would pay the universal plan's copayment requirements and the costs of medical services excluded from the plan (such as long-term care) for eligible people. Many alternatives, however, could be designed for sharing the costs of a single-payer system among levels of government.

In 1989, the increase in taxes necessary to finance additional costs under the single-payer plan would be about $560 per capita. Taxes would increase automatically to some degree if employers increased taxable forms of compensation (such as wages) as their health benefit costs were transferred to the public sector. Because private-sector costs would decrease by $662 per capita, the net cost of achieving universal insurance coverage under a single-payer system would be negative. In the aggregate, the population would have an additional $102 per capita to spend, if the midrange assumptions used were correct. Actual effects on individuals, however, would vary greatly around this average.

Under a single-payer system, private insurers would be prohibited from offering any coverage for basic medical services, although they could offer it for services not covered by the universal plan. This would severely limit their market and could cause significant shifts of investment dollars and employment to other sectors of the economy. If the single payer used private insurers to process claims as Medicare does now, though, shifts in employment would be relatively small.

DISTRIBUTIONAL EFFECTS

One consideration in deciding whether or not to change the current health care system is how much the new system would redistribute resources among health care consumers, providers, and those employed in the health care sector.

Effects on Consumers

The effect of the approaches examined here on consumers would depend not only on the change in their insurance benefits, but also on the net change in their payments for insurance coverage. A shift from private toward public financing would not necessarily require that consumers pay more as a group for health insurance, but could imply a substantial redistribution of the costs among individuals. The potential for redistribution would be much greater under a single-payer system, compared with an all-payer approach, because the shift to public financing would be much greater.

Under our present system, those with private health insurance are already paying virtually all of the costs of that coverage--either as premiums or through lower wages that compensate for the cost of employment-based health insurance benefits. Private insurance, then, is effectively financed by a flat fee on each insured individual. This fee may vary with the size of the insured household and the choice of insurance coverage, but not with income.

If revenues to pay for expanding the role of government as health insurer were obtained through any of the usual taxes, high-income people would pay a relatively large proportion of them. People in this group are typically well-insured now, and would be unlikely to receive more generous coverage under either the all-payer or the single-payer approaches examined here. They would receive some financial benefits, such as lower cost-sharing expenses, although those benefits might fall short of the increased taxes they would pay.

But either of the approaches examined here would also offer nonfinancial benefits. Insurance coverage would be guaranteed, in contrast to the current situation in which changes in employment or marital status threaten continuity of coverage. Such a guarantee would eliminate uncertainty and anxiety about coverage. Further, especially under a single-payer system, the difficulties of collecting insurance benefits that are often encountered under the current system would be greatly reduced.

All-Payer System. Under the all-payer system examined here (assuming no change in coverage for those who now have it), all consumers would have health insurance benefits at least as generous as they now have, and those currently without insurance would be covered. The prohibition on balance billing would reduce cost-sharing expenses for Medicare enrollees, who could retain their medigap coverage under this approach. Cost-sharing expenses would also fall for those with private insurance, not only because balance billing would be eliminated, but because providers' payment rates (on which coinsurance is based) would typically be lower. Private insurance premiums might also decrease. For Medicaid enrollees, higher payment rates would improve access to physician and hospital services.

Health care spending would increase by less than 1 percent overall under this option (using the midrange assumptions), because savings on payments for the privately insured and on overhead expenses for providers would be almost enough to cover the costs of improving coverage for Medicaid recipients and the uninsured. Government costs, however, would increase by nearly $26 billion. If these additional costs under Medicare and Medicaid were financed from taxes, they would be paid largely by higher income people with private insurance, whose additional benefits under this option would be relatively small. Benefits would be especially small if insurers and employers failed to pass the savings from lower payment rates on to the insured population, although this would probably be a transitional phenomenon.

Single-Payer System. A single-payer system would reduce health insurance benefits for some enrollees, although the average increase in benefits would equal the increase under an all-payer system. This study assumes that benefits under the universal plan would be actuarially equivalent to the average benefits currently provided under Medicare and private plans. Presumably, it would cover most basic medical services, and it would impose moderate copayment requirements up to an annual ceiling on each patient's out-of-pocket expenses. Private plans that are better than average, however, have low copayment requirements and cover more services, such as dental and mental health care. People who now have generous coverage--either private insurance or a combination of Medicare and a private supplement--would find that their benefits were lower under the universal plan.

Medicaid beneficiaries would not be adversely affected because the illustrative plan assumes a residual Medicaid program that would continue benefits not provided under the universal plan.

Although total spending on health care would decrease by about 4 percent under this option (using the midrange assumptions), not all consumers would be net beneficiaries if taxes financed the universal plan. High-income people would almost certainly pay more in additional taxes than the actuarial value of the benefits provided under the universal plan, thereby subsidizing lower income people. Because this kind of subsidy among income groups is not a feature of most private insurance plans now, adopting a publicly financed universal plan would adversely affect high-income people.

Effects on Providers

Since Medicare's payment rates would be used for all covered physician and hospital services under both approaches examined here, the two approaches would have the same redistributive effects on providers. Revenues to providers, less overhead costs, would generally increase, because payments would be made for care that had previously been provided without full reimbursement and because use of services would rise. Despite this, some providers would see their net revenues fall because the effects of lower payment rates for privately insured patients would be larger than the effects of higher payments from others.

The effects on net revenues for individual providers would differ depending on their current mix of patients, by source of payment. Those who had been serving low-income, largely uninsured populations would find their net revenues rising and the demand for their services increasing. Physicians in areas where the population was already well insured and physicians who refused to accept uninsured patients would collect less unless they were able to offset lower payment rates by changing their practice or billing patterns. (Another way to recover lost revenues--billing patients for amounts that exceeded approved payment rates--would be prohibited in the illustrations examined here.)

The effects on hospitals would be similar. Large urban hospitals that provide substantial services at a loss to Medicaid recipients and to patients without insurance would be financially better off under a system that included uniform rates for all patients. These hospitals would receive higher payments for services to Medicaid patients and would be paid for all services to previously uninsured individuals. Both patient groups would probably also use more hospital services. Uniform payment rates would have very different effects, however, on hospitals located in areas where most of the population was already well insured through private plans. Since Medicare's payment rates are lower than private rates, on average, these hospitals would receive less for their existing mix of patients. Greater use by those who were previously uninsured and by Medicaid recipients might offset some loss in hospitals' net income, but the overall effect would probably still be lower revenues.

Effects on Employment in the Health Care Sector

Under either an all-payer or a single-payer system, providers would need fewer billing staff and more health care personnel. The increased need for health care personnel--attributable to greater use of services--would be the same under both systems. But the decrease in providers' demand for billing staff would be greater under a single-payer system than under an all-payer approach because billing procedures would be simpler under the single-payer system.

The demand for administrative personnel in the private insurance industry would not be expected to change under an all-payer system, while a substantial decrease in demand could take place under a single-payer system. The size of the potential decrease under a single-payer system would depend on two factors: how aggressively private insurers moved into the insurance market for services not covered by the universal plan, and how extensively the public plan used private insurers as administrative agents for processing claims. If the public plan used private insurers as administrative agents, most personnel who now process claims for private insurers would simply begin processing claims for the public insurer.

Introducing either an all-payer or a single-payer system could cause temporary dislocations in the labor market, with disruption more extensive under a single-payer system. These dislocations would adversely affect some workers and could temporarily raise the costs of unemployment insurance.

POTENTIAL FOR COST CONTROL

Adopting either an all-payer or a single-payer system could improve control of health care costs because the government would set prices and could limit their rate of increase. Both approaches might also permit more effective control over total spending by limiting the volume of services. While the potential for control of total spending would be inherent in a single-payer system, the same potential could be achieved under an all-payer system if it included comprehensive and coordinated controls for all payers on the volume of services as well as prices. Under either system, though, realizing the potential for cost containment would depend on how effectively controls were applied. Savings on the costs of administration would necessarily be smaller under an all-payer than a single-payer system.

Under either system, it would be easier to reduce the rate of increase in health care costs through price controls, whether or not other cost containment methods were adopted. Even if the new payment rates were applied in a spending-neutral fashion for the first year, price increases that were permitted in the future could be well below those that would have occurred under the current system. The magnitude of savings achieved by limiting price increases would depend on allowed increases and the extent to which increases in volume would offset some of the potential savings from price controls. Although a substantial volume offset on physician services seems to occur now when prices are controlled, this response might abate over time. In other words, while increases in volume might partially offset price controls initially, the potential for further expansion of services per capita might gradually be exhausted.

With uniform prices in place, other cost-control measures would be more effective. For example, either system could be designed to produce data on the practice patterns of physicians. If these data were available, physicians' treatment practices could be monitored to identify and influence those whose practices were significantly more costly than the norm. Similarly, a comprehensive data base derived from a uniform payment system could provide the means for health planning and capital controls. Administrators could identify hospitals and other facilities that were not using their equipment optimally.

Control over price increases and the availability of uniform data on specific aspects of providers' operations would also provide a stronger foundation for establishing realistic expenditure targets or caps for the health care system. Increases that exceeded the targets could be broken down by type of provider and geographic area, which would permit any penalties to be focused on problem areas rather than applied broadly, if desired.

But successful control over prices and the volume of services also means that providers would receive less for each service, that the average consumer might receive fewer services, and that there might be less employment in the health sector unless increased demand by the newly insured was great enough to offset the effects of cost controls. Moreover, some of the desirable features of the current health care system could be undermined. In particular, cost controls could impede research and development, reduce access to new technology, and restrict consumers' choices about providers and treatment alternatives. Whether these trade-offs would be acceptable depends on whether the nation places a higher priority on controlling costs or on maintaining other desirable characteristics of the current health care system.

APPENDIXES

APPENDIX A

ALTERNATIVE ESTIMATES FOR THE SAVINGS IN ADMINISTRATIVE COSTS UNDER A SINGLE-PAYER SYSTEM

A number of recent studies have suggested that the administrative costs of the U.S. health insurance system are high, compared with those costs in a single-payer system. Specific comparisons have been made with Canada. This appendix compares the results of three recent studies of potential savings on administrative costs if the United States adopted a Canadian-style single-payer system (see Table A-1). Because the studies present results for different years, the estimated dollar savings are not comparable. To make them comparable, the estimated savings from each study are shown as a percent of personal health expenditures (PHE).

Comprehensive health insurance for basic medical services in Canada is provided by a single public insurer in each province. All of the studies of a Canadian-style system assume global budgeting for hospitals, rather than patient-specific billing. They also assume that providers would have no expenses for billing patients because there would be no copayment requirements.

Estimated savings on providers' overhead costs under a single-payer system like Canada's range from 5.3 percent to 13.1 percent of PHE. These estimates do not fully reflect the lower costs of malpractice insurance that are typical in Canada as compared with the United States. Savings on malpractice insurance might be possible, however, under a single-payer system in the United States. Universal insurance coverage under a tax-financed public plan would greatly reduce the component of malpractice awards (one-fourth) that is intended to compensate for medical costs incurred or expected.

Savings on insurers' overhead costs under a Canadian-style single-payer system range from 4.3 percent to 5.4 percent of PHE. Estimates of these costs under the Canadian system include not only the costs of the provincial public insurance plans, but also of private

insurers who can and do offer insurance for services not covered by the public plans.

The assumptions made in this study about savings on administrative costs under a Medicare-style, single-payer system are shown in the bottom panel of Table A-1. Alternative 3 would deliver the largest savings. Alternative 2 reduces the maximum savings on providers'

TABLE A-1. ESTIMATES OF ADMINISTRATIVE SAVINGS UNDER SINGLE-PAYER SYSTEMS (As a percent of personal health expenditures)

	Reduction in Providers' Overhead Costs			Reduction in Insurers' Overhead Costs
	Physicians	Hospitals	Total	
Estimates For Canadian-Style Single-Payer System				
W&H (for 1987)[a]				
Expense-based	6.9	6.3	13.1	5.0
Personnel-based	3.6	6.3	9.9	5.0
Grumbach (for 1991)[b]	1.4	4.9	6.4	4.3
GAO (for 1991)[c]	2.4	2.9	5.3	5.4
Estimates For Medicare-Style Single-Payer System				
CBO (for 1989)				
Alternative 1	0	0	0	4.2
Alternative 2	1.8	1.6	3.4	4.2
Alternative 3[d]	3.6	3.1	6.8	4.2

SOURCE: Congressional Budget Office.

a. Steffie Woolhandler and David Himmelstein, "The Deteriorating Administrative Efficiency of the U.S. Health Care System," *New England Journal of Medicine*, vol. 324, no. 18 (May 2, 1991), Table 1.

b. Kevin Grumbach and others, "Liberal Benefits, Conservative Spending: The Physicians for a National Health Program Proposal," *Journal of the American Medical Association*, vol. 265, no. 19 (May 15, 1991), Table 1.

c. U. S. General Accounting Office, *Canadian Health Insurance: Lessons for the United States* (June 1991), Table 5.1. Estimates are based on the Ontario health insurance system.

d. These assumptions use the Woolhandler and Himmelstein (W&H) personnel-based results for physician savings, and half the W&H savings for hospital overhead. For insurers' overhead, it is assumed that a single payer would face Medicare's administrative rate on the value of services covered.

APPENDIX A

ALTERNATIVE ESTIMATES FOR THE SAVINGS IN ADMINISTRATIVE COSTS UNDER A SINGLE-PAYER SYSTEM

A number of recent studies have suggested that the administrative costs of the U.S. health insurance system are high, compared with those costs in a single-payer system. Specific comparisons have been made with Canada. This appendix compares the results of three recent studies of potential savings on administrative costs if the United States adopted a Canadian-style single-payer system (see Table A-1). Because the studies present results for different years, the estimated dollar savings are not comparable. To make them comparable, the estimated savings from each study are shown as a percent of personal health expenditures (PHE).

Comprehensive health insurance for basic medical services in Canada is provided by a single public insurer in each province. All of the studies of a Canadian-style system assume global budgeting for hospitals, rather than patient-specific billing. They also assume that providers would have no expenses for billing patients because there would be no copayment requirements.

Estimated savings on providers' overhead costs under a single-payer system like Canada's range from 5.3 percent to 13.1 percent of PHE. These estimates do not fully reflect the lower costs of malpractice insurance that are typical in Canada as compared with the United States. Savings on malpractice insurance might be possible, however, under a single-payer system in the United States. Universal insurance coverage under a tax-financed public plan would greatly reduce the component of malpractice awards (one-fourth) that is intended to compensate for medical costs incurred or expected.

Savings on insurers' overhead costs under a Canadian-style single-payer system range from 4.3 percent to 5.4 percent of PHE. Estimates of these costs under the Canadian system include not only the costs of the provincial public insurance plans, but also of private

insurers who can and do offer insurance for services not covered by the public plans.

The assumptions made in this study about savings on administrative costs under a Medicare-style, single-payer system are shown in the bottom panel of Table A-1. Alternative 3 would deliver the largest savings. Alternative 2 reduces the maximum savings on providers'

TABLE A-1. ESTIMATES OF ADMINISTRATIVE SAVINGS UNDER SINGLE-PAYER SYSTEMS (As a percent of personal health expenditures)

	Reduction in Providers' Overhead Costs			Reduction in Insurers' Overhead Costs
	Physicians	Hospitals	Total	
Estimates For Canadian-Style Single-Payer System				
W&H (for 1987)[a]				
Expense-based	6.9	6.3	13.1	5.0
Personnel-based	3.6	6.3	9.9	5.0
Grumbach (for 1991)[b]	1.4	4.9	6.4	4.3
GAO (for 1991)[c]	2.4	2.9	5.3	5.4
Estimates For Medicare-Style Single-Payer System				
CBO (for 1989)				
Alternative 1	0	0	0	4.2
Alternative 2	1.8	1.6	3.4	4.2
Alternative 3[d]	3.6	3.1	6.8	4.2

SOURCE: Congressional Budget Office.

a. Steffie Woolhandler and David Himmelstein, "The Deteriorating Administrative Efficiency of the U.S. Health Care System," *New England Journal of Medicine*, vol. 324, no. 18 (May 2, 1991), Table 1.

b. Kevin Grumbach and others, "Liberal Benefits, Conservative Spending: The Physicians for a National Health Program Proposal," *Journal of the American Medical Association*, vol. 265, no. 19 (May 15, 1991), Table 1.

c. U. S. General Accounting Office, *Canadian Health Insurance: Lessons for the United States* (June 1991), Table 5.1. Estimates are based on the Ontario health insurance system.

d. These assumptions use the Woolhandler and Himmelstein (W&H) personnel-based results for physician savings, and half the W&H savings for hospital overhead. For insurers' overhead, it is assumed that a single payer would face Medicare's administrative rate on the value of services covered.

overhead by half, and Alternative 1 eliminates them. Savings on insurers' overhead do not vary across the alternatives.

The assumptions used for savings on providers' overhead under Alternative 3 are derived from the personnel-based estimates developed by Woolhandler and Himmelstein (W&H).[1] It is assumed that the maximum potential savings on physician overhead are equal to the W&H estimates. But this study assumes that maximum potential savings on hospital overhead costs are only half the W&H estimates. This assumption is made because billing information on individual patients would have to be retained under a Medicare-style system, not only because of copayment requirements, but also because of the way Medicare sets payment rates for hospitals.[2]

For savings on insurers' overhead under a Medicare-style system, it is assumed that the single payer could achieve Medicare's administrative rate (about 1.9 percent of the value of services covered). It is also assumed that all administrative costs for private insurers and for the current Medicare program would be eliminated. Apart from Medicare, though, all other administrative costs for public health programs would be unchanged.

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1. Steffie Woolhandler and David Himmelstein, "The Deteriorating Administrative Efficiency of the U.S. Health Care System," *New England Journal of Medicine*, vol. 324, no. 18 (May 2, 1991), Table 1.

2. Most of the Canadian provinces are now developing patient-specific financial information for hospitals that is more like hospital information systems in the United States. It is believed that such information will improve both the quality of care patients receive and the ability to set hospital budgets appropriately.

APPENDIX B

ESTIMATED SPENDING FOR PHYSICIAN SERVICES AT MEDICARE'S RATES

This appendix shows the calculations used to estimate the changes in spending for physician services under the illustrative options discussed in Chapter III, using the alternative assumptions shown there in Table 4. It makes use of information presented in Chapter II indicating that, on average, Medicare's rates are 70 percent of physicians' submitted charges, 84 percent of rates paid by private insurers, and 140 percent of rates paid by Medicaid. These relative rates are used for Alternative 2. To allow for uncertainty, Alternative 1 assumes that Medicare's rates are 5 percent higher, and Alternative 3 assumes they are 5 percent lower, than the rates used for Alternative 2.

Estimated spending for the uninsured at Medicare's rates is based on the amount of physician care they received in 1989. Total charges for physician services to the uninsured include all charity care ($5.8 billion), 68 percent of bad debt ($2.2 billion), and out-of-pocket payments by the uninsured ($2.5 billion), for a total of $10.5 billion. (This assumes that the proportion of bad debt that represents physicians' services to the uninsured is the same as it is for hospitals.) Spending at Medicare's rates is obtained by first applying the Medicare reduction on actual charges and then calculating the increase in payments caused by expanded use of services. Thus, estimated spending for the uninsured at Medicare's rates would be:

Alternative 1: ($10.5 billion)(.735)(1.560) = $12.0 billion;
Alternative 2: ($10.5 billion)(.700)(1.420) = $10.4 billion;
Alternative 3: ($10.5 billion)(.665)(1.280) = $ 8.9 billion.

Actual spending by Medicaid for physician services was $4.2 billion in 1989. Subtracting the estimated amount spent on Medicare enrollees' copayment costs ($1.7 billion) leaves $2.5 billion in Medicaid spending for non-Medicare groups. Spending at Medicare's rates is obtained by applying the increase in payment rates, then calculating

the further increase in payments resulting from expanded use of services. Estimated spending for non-Medicare Medicaid enrollees would be:

Alternative 1: ($2.5 billion)(1.470)(1.235) = $4.5 billion;
Alternative 2: ($2.5 billion)(1.400)(1.157) = $4.1 billion;
Alternative 3: ($2.5 billion)(1.330)(1.091) = $3.6 billion.

Actual consumer spending for physician services was $78.4 billion in 1989. After subtracting copayment and balance billing amounts for Medicare enrollees ($12.0 billion) and out-of-pocket payments by the uninsured ($2.5 billion), the remainder is $63.9 billion in spending by the privately insured. Spending for the privately insured at Medicare's rates is obtained by applying the reduction in payment rates and then introducing a response in the volume of services provided by physicians designed to recover half of their revenue losses from lower payment rates. Spending at Medicare's rates for the privately insured would be:

Alternative 1: ($63.9 billion)(.882+(1-.882)(.5)) = $60.2 billion;
Alternative 2: ($63.9 billion)(.840+(1-.840)(.5)) = $58.8 billion;
Alternative 3: ($63.9 billion)(.798+(1-.798)(.5)) = $57.5 billion.

(This does not fully reflect the reduction in spending that would result from eliminating balance billing.)

Actual spending for physician services under Medicare was $41.2 billion in 1989: $27.5 billion in benefit payments, $11.5 billion in copayments, and $2.2 billion in balance billing. There would be no change in benefit payments or copayment amounts, but spending would decrease because balance billing would be eliminated. Because half of the potential loss in revenues to physicians would be offset by an increase in the volume of services provided, spending would drop by $1.1 billion. Hence, for all three alternatives, Medicare spending would be:

All Alternatives: $41.2 billion - (.5) $2.2 billion = $40.1 billion.

APPENDIX C

ESTIMATED SPENDING FOR HOSPITAL SERVICES AT MEDICARE'S RATES

This appendix shows the calculations used to estimate the changes in spending for hospital services under the illustrative options discussed in Chapter III, using the alternative assumptions shown there in Table 4. It uses information presented in Chapter II indicating that hospital rates paid by private insurers could be 88 percent of current values and still cover costs, while Medicaid rates would have to be 128 percent of current values to cover costs. It is assumed that Medicare's rates just cover hospital costs, on average, so that changing rates for other payers to cover hospital costs would be equivalent to using Medicare's rates. The relative rates mentioned above are used for Alternative 2. To allow for uncertainty, Alternative 1 assumes that Medicare's rates are 5 percent higher, and Alternative 3 assumes they are 5 percent lower, than the rates assumed for Alternative 2.

Estimated spending for the uninsured at Medicare's rates is based on the amount of hospital care they received in 1989. Total uncompensated charges for community hospitals were $15.6 billion in 1989. However, not all of these charges were for the uninsured. One study found that charity care accounted for 27.4 percent of uncompensated care and bad debts made up the rest. Of bad debts, 68 percent was for the uninsured.[1] It is assumed that all charity care is for the uninsured. By applying these percentages to the 1989 data, uncompensated hospital charges for the uninsured would total $12 billion. In addition, it is assumed that the uninsured paid $2.5 billion out of pocket. Total charges for hospital care provided to the uninsured were then $14.5 billion. Costs of care for the uninsured are 71.2 percent of charges, or $10.3 billion, based on a charge-to-cost ratio of 1.405 obtained from the American Hospital Association. Spending at Medicare's rates is estimated by assuming that the rates would just cover costs (which could

1. Gloria J. Bazzoli, "Health Care for the Indigent: Overview of Critical Issues," *Health Services Research*, vol. 21, no. 3 (August 1986).

be up to 5 percent higher or lower than estimated) and that use of services would increase. Estimated spending for the uninsured at Medicare's rates would be:

Alternative 1: ($14.5 billion)(.747)(1.640) = $17.7 billion;
Alternative 2: ($14.5 billion)(.712)(1.480) = $15.2 billion;
Alternative 3: ($14.5 billion)(.676)(1.320) = $12.9 billion.

Actual spending by Medicaid on hospital services was $22.9 billion in 1989, but an estimated $0.6 billion of this was used to pay copayment costs for Medicare enrollees. Another $2.0 billion was for hospital services that would not be affected (mainly psychiatric hospitals). Therefore, spending at Medicaid's rates was $20.3 billion. Estimated spending at Medicare's rates is obtained by increasing payment rates and allowing for an increase in use of services by non-Medicare recipients. It would be:

Alternative 1: ($20.3 billion)(1.344)(1.198) = $32.6 billion;
Alternative 2: ($20.3 billion)(1.280)(1.127) = $29.2 billion;
Alternative 3: ($20.3 billion)(1.216)(1.069) = $26.3 billion.

Actual consumer spending on hospital services was $96.9 billion in 1989. Subtracting $3.4 billion in spending by Medicare enrollees for copayments, $2.5 billion in payments by the uninsured, and $4.2 billion for hospital services that would not be affected leaves $86.8 billion in spending for the privately insured. Estimated spending at Medicare's rates is obtained by reducing payment rates so that spending for the privately insured would be:

Alternative 1: ($86.8 billion)(.924) = $80.2 billion;
Alternative 2: ($86.8 billion)(.880) = $76.4 billion;
Alternative 3: ($86.8 billion)(.836) = $72.5 billion.

There would be no change in spending under Medicare for hospital services for any of the three alternatives. It was $66.1 billion in 1989: $62.1 billion in benefit payments and $4.0 billion in copayments.

APPENDIX D

ESTIMATED SPENDING FOR ADMINISTRATIVE COSTS

This appendix shows the calculations used to estimate the changes in administrative costs that might occur under the illustrative options discussed in Chapter III, using the alternative assumptions shown there in Table 4. Administrative costs include overhead expenses for both providers and insurers (including public payers).

CHANGES IN PROVIDERS' OVERHEAD EXPENSES

Actual costs for providers' overhead were an estimated 15 percent of PHE, or $79.5 billion, in 1989. It is assumed that these costs could be reduced to as low as 8.2 percent of PHE under a single-payer system. Alternative 3 assumes that all of these savings would be realized, while Alternative 2 assumes that only half would be captured, and Alternative 1 assumes that none would be. Thus, providers' overhead expenses would be:

Alternative 1: (.150)($530.7 billion + $25.6 billion) = $83.3 billion;
Alternative 2: (.116)($530.7 billion + $12.5 billion) = $63.0 billion;
Alternative 3: (.082)($530.7 billion + $ 0.2 billion) = $43.6 billion.

Under an all-payer system, the reduction in providers' overhead expenses, expressed as a percentage of PHE, is assumed to be half of what it would be under a single-payer system for the corresponding alternative. Hence, providers' overhead expenses would be:

Alternative 1: (.150)($530.7 billion + $25.6 billion) = $83.3 billion;
Alternative 2: (.133)($530.7 billion + $12.5 billion) = $72.1 billion;
Alternative 3: (.116)($530.7 billion + $ 0.2 billion) = $61.5 billion.

CHANGES IN INSURERS' OVERHEAD EXPENSES

Actual spending on insurers' overhead was $35.3 billion in 1989. Program administration costs for Medicare were 2.3 percent of benefit payments, or 1.9 percent of the value of covered services (benefit payments plus copayment and balance billing amounts). Both the all-payer and the single-payer approaches examined in this paper assume that any expanded or new public insurance program would have the same ratio of administrative costs to the value of covered services as Medicare did in 1989.

Under an all-payer approach, overhead costs for insurers would be unchanged except for the additional expenses associated with extending Medicare coverage to the uninsured. Hence, insurers' costs would be:

Alternative 1: ($35.3 billion) + (.019)($12.0 billion + $17.7 billion) = $35.9 billion;

Alternative 2: ($35.3 billion) + (.019)($10.4 billion + $15.2 billion) = $35.8 billion;

Alternative 3: ($35.3 billion) + (.019)($8.9 billion + $12.9 billion) = $35.7 billion.

Under a single-payer system, administrative costs for Medicare and for private insurers would be eliminated (an amount equal to $29.6 billion in 1989), while all administrative costs for public health programs except those for Medicare would be unchanged ($5.7 billion in 1989). Administrative costs for the new single payer would be 1.9 percent of the value of services covered by the universal plan, which would be an estimated 70 percent of personal health expenditures. (This represents the value of services now covered by private insurers and Medicare, plus Medicaid benefits exclusive of those for nursing home care.) Hence, administrative costs for the single payer would be 1.36 percent of PHE. The value of PHE under the single-payer option would

be the 1989 value of $530.7 billion plus the change in spending for physician and hospital services. Thus, insurers' overhead costs would be:

Alternative 1: ($5.7 billion) + (.0136)($530.7 billion + $25.6 billion) = $13.2 billion;

Alternative 2: ($5.7 billion) + (.0136)($530.7 billion + $12.5 billion) = $13.1 billion;

Alternative 3: ($5.7 billion) + (.0136)($530.7 billion + $ 0.2 billion) = $12.9 billion.

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